MARYLAND COASTAL NONPOINT PROGRAM
NOAA/EPA DECISIONS ON CONDITIONS OF APPROVAL

FOREWORD

This document contains decisions on conditions of approval placed on the coastal nonpoint pollution control program submitted by the State of Maryland pursuant to Section 6217(a) of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA). The Findings for Maryland=s coastal nonpoint program were issued on October 3, 1997. Since that time, Maryland has undertaken a number of actions to address conditions of approval on its coastal nonpoint program. Based on those actions and on materials Maryland has provided to document how the conditions have been met, the National Oceanic and Atmospheric Administration (NOAA) and the U.S. Environmental Protection Agency (EPA) find that Maryland has satisfied all conditions of approval.

This document is organized in the same fashion as the Findings for Maryland=s coastal nonpoint program. Where the original Findings included a condition, this document repeats the condition, includes a decision as to whether the condition has been satisfied, and provides a rationale for the decision. For further understanding of terms in this document and the basis for these decisions, the reader is referred to the following:

Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters (EPA, January 1993)
Coastal Nonpoint Pollution Control Program: Program Development and Approval Guidance (NOAA and EPA, January 1993)
Flexibility for State Coastal Nonpoint Programs (NOAA and EPA, March 1995)
Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance for Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) (NOAA and EPA, October, 1998)

FINAL APPROVAL DECISION

NOAA and EPA find that State of Maryland has satisfied all conditions placed on approval of the Maryland coastal nonpoint pollution control program submitted to NOAA and EPA pursuant to Section 6217(a) of the Coastal Zone Act Reauthorization Amendments of 1990. Therefore, Maryland=s coastal nonpoint program meets all program requirements and is hereby fully approved, constituting a final approval decision for the program.

AGRICULTURE

CONDITION: Within one year, Maryland will develop a strategy (in accordance with Section XIV of the Findings for the Maryland coastal nonpoint program) to implement the confined animal facilities, nutrient management, pesticide management, and grazing management measures throughout the 6217 management area.

DECISION: Maryland has satisfied this condition.

RATIONALE: Maryland has undertaken a number of activities that will further ensure implementation of the agricultural management measures for confined animal facilities, nutrient management, pesticide management, and grazing management. Supplemental material provided by the State to NOAA and EPA documents this progress.

Since the Findings were issued for Maryland=s coastal nonpoint program, the State enacted the Water Quality Improvement Act of 1998. This new law applies to all agricultural operations with annual gross incomes in excess of $2,500 or more than 8 animal units. The law requires that agricultural producers implement a nutrient management plan in conformity with the (g) guidance as follows:

> By December 31, 2001, Maryland farmers using chemical fertilizers must have nitrogen and phosphorus-based nutrient management plans developed. Those plans must be in place one year later. By December 31, 2001, farmers applying animal manure or sludge must have a nitrogen-based plan, with implementation required within one year. By July 1, 2004, farmers applying animal manure or sludge will be required to develop a nitrogen and phosphorus-based plan, with implementation required one year later.

This new authority provides Maryland with the ability to ensure implementation of the management measure for nutrient management. Maryland is in the process of developing regulations to implement the Water Quality Improvement Act. NOAA and EPA support the development of these regulations.

Since the Findings were issued, Maryland has documented measurable results to demonstrate how its Integrated Pest Management (IPM) Program implements the pesticide management measure. Specifically, Maryland has conducted training efforts for both professional crop consultants as well as gardeners. During the 6 month period from January through June of 1998, a total of 1,380 people were trained in various aspects of IPM, of which approximately 40 percent were home gardeners. Maryland has made clear progress in ensuring that integrated pest management is implemented for the full range of pesticide applicators.

For the confined animal facility management measures, Maryland=s new Water Quality Improvement Act provides a strong program to enhance existing efforts to ensure implementation. Farmers will be required to develop nutrient management plans that address proper utilization of animal waste as it is applied to land. In addition, the law establishes an Animal Waste Technology Fund Ato encourage the development and implementation of economically feasible technologies that help protect the public health and the environment by reducing the amount of

nutrients from animal waste that are released to state waters.@ Maryland has also developed a credible survey tool to demonstrate the ability of the State=s existing approach to achieve implementation of the management measures for confined animal facilities. The State conducted a ASample Survey of Best Management Practices Used on Animal Operations in Maryland=s Coastal Zone,@ published in June 1996. The intent of the survey was to provide a tool to modify and enhance state programs to meet nonpoint source pollution control goals. Survey results indicated that a large percentage of dairy farms in the coastal zone (71 percent) store animal waste. The survey concluded that ASubstantial progress has been made in all areas CZARA is concerned with but additional progress to enhance on-farm resource use efficiency and improve environmental conditions is still possible.@ Continuing and expanded state efforts, in addition to the recent Federal Unified National Strategy for Animal Feeding Operations, will provide the additional program emphasis necessary to ensure implementation of animal waste management measures in Maryland.

Based on discussions with representatives of the Maryland Department of Agriculture (MDA), grazing in Maryland=s coastal zone is not extensive. Even so, for grazing management, Maryland has further developed and implemented a number of programs statewide to ensure that grazing is managed to protect sensitive areas such as streambanks, wetlands, estuaries, ponds, lake shores, and riparian areas. Through the Conservation Reserve Enhancement Program (CREP), Maryland has shown substantial progress in implementing practices such as grass buffers, riparian forest buffers, wetland restoration, and retirement of highly erodible land. The CREP has a goal of enrolling 100,000 acres in Maryland. Progress towards this goal is being tracked by MDA. According to the June 1996 survey cited above, on a statewide basis, 84 percent of livestock farms surveyed reported owning pasture land. Over 48 percent of the livestock operations reported practicing rotational grazing. Finally, Maryland=s Agricultural Sediment Control Law and Regulations (MD CODE ANN. ENVIR. ''4-413 and 4-417 and MD REGS CODE '26.09.03.01 - .08) prohibit agricultural operations from adding, introducing, leaking, spilling, or otherwise emitting soil or sediment into waters of the State, or placing soil or sediment in a condition or location where it is likely to be washed into waters of the State. This authority can be used to address severe erosion problems caused by improper grazing practices.

NEW AND OPERATING ONSITE DISPOSAL SYSTEMS (OSDS)

CONDITION: Within three years, Maryland will include in its program management measures for protection of nitrogen-limited surface waters and inspection and maintenance of existing OSDS in conformity with the 6217(g) guidance.

DECISION: Maryland has satisfied this condition.

RATIONALE: Since the issuance of the Findings, Maryland has undertaken a number of activities to further develop management measures for new and operating onsite disposal systems, including the protection of nitrogen-limited surface waters and inspection and maintenance of existing OSDS. Supplemental material submitted to NOAA and EPA by the State documents this progress.

Maryland will identify nitrogen limited surface waters which may be adversely affected by excess nitrogen loadings from ground water associated with OSDS through a new program to delineate Areas of Special Concern (ASC). Localities may petition the Maryland Department of the Environment (MDE) to have an area designated as an ASC. Once areas are identified and receive formal designation, a management plan for septic systems is developed jointly by the State and the local authority. The plan addresses design, inspection (including enforcement), operation and maintenance, and also provides for homeowner education. Thus far, Worcester County has petitioned MDE to designate the Maryland Coastal Bays area (Worcester County) an ASC and the formal designation by MDE is in process. As set forth in the petition, the ASC plan will require new development of existing lots and all replacement systems that do not meet current standards for a conventional system to use alternative technologies, establish a public outreach program, and develop a tracking program for septic system maintenance and septage disposal.

In addition, the Comprehensive Conservation and Management Plan (CCMP) for the Coastal Bays National Estuary Program, which will be submitted to EPA for approval, outlines a number of actions that Worcester County will undertake to address adverse effects of OSDS on AN@ limited waters. These actions include: promoting the use of appropriate alternative and innovative septic disposal systems on certain existing properties, retrofitting failing or antiquated septic systems, and developing a program to properly maintain OSDS .

Maryland=s new watershed cycling strategy B focusing significant state attention and resources on a particular watershed on a five year cycle B will also provide the detailed watershed and water quality assessments that will enable the State to further identify nitrogen sensitive waters impacted by OSDS that would trigger future ASC designations. This, in combination with the actions outlined above, should provide Maryland with a systematic assessment of water quality impacts from OSDS in order to ascertain failures and direct appropriate resources and programs to address such failures.

In response to the problems Maryland has had with *Pfiesteria*, MDE was directed to evaluate available best management practices that can be used to enhance septic systems technology in order to achieve reductions in nitrogen. The resulting white paper has lead to the drafting of new regulations that specify, among other things, new standards and criteria for the installation of septic systems. While these regulations are still in development, they currently propose a number of good provisions, including a requirement that new permits for OSDS include a statement indicating that a septic tank should be pumped once every three years and the development of a system of tracking and enforcement for OSDS advanced treatment units to ensure that such units function properly. These preventive measures are excellent tools to ensure that systems are properly maintained and reduce the likelihood of future failures.

Finally, Maryland conducts a biennial needs survey of local governments to identify areas with failing OSDS. Where extensive areas of OSDS failure are identified, projects are funded to provide connections to central sewer systems. Through the Water Quality Financing Administration Linked Deposit Program, financing is available for projects that repair or replace failing or failed OSDS. Under this program, private property owners may borrow funds from private lending institutions located in their neighborhoods to finance projects to control non-point source pollution. These loans may be used for design and construction of a wide variety of water

quality improvements to protect groundwater and surface water from nonpoint source pollution, including leaking underground storage tanks and failing septic systems.

MARINA AND BOAT OPERATION AND MAINTENANCE

CONDITION: Within one year, Maryland will develop a strategy (in accordance with Section XIV of the Findings for the Maryland coastal nonpoint program) to implement the fish waste, liquid material, petroleum control, and boat cleaning management measures throughout the 6217 management area.

DECISION: Maryland has satisfied this condition.

RATIONALE: The Maryland Department of Natural Resources (DNR), in conjunction with other state agency and industry partners, has developed a AClean Marinas@ initiative that includes, among others, practices in conformity with the fish waste, liquid material, petroleum control, and boat cleaning management measures. A comprehensive manual was developed for marina operators that discusses specific practices needed to meet the measures. Distribution of the Clean Marinas Guidebook was accompanied by workshops to introduce marina operators to the goals and structure of the initiative. Standards for an award checklist were developed; compliance is determined first through self-inspection followed by verification by Clean Marina representatives. Qualified marinas -- those that adopt a significant percentage of the required and voluntary best management practices contained in the Guidebook -- receive recognition as Clean Marinas. This entails receiving a citation, a burgee with the Clean Marina logo, permission to use the logo in advertising materials and on letterhead, and recognition in official Clean Marina promotional materials and publications (e.g., web site, exhibits).

An extensive outreach campaign was developed and conducted to promote this initiative. It included fact sheets, clean boating tip cards, petroleum control kits, a public display and exhibits (used at boating-related events). Maryland identified measurable results to demonstrate the State=s ability to achieve implementation of the fish waste, liquid material, petroleum control, and boat cleaning management measures, establishing a goal of having 25% of its marinas certified as clean marinas by 2004. As of August 1999, 6 Awards have already been presented, and 64 additional marinas have signed Clean Marina Pledges, the first step towards becoming certified. This early success shows that Maryland has the ability to achieve implementation of the fish waste, liquid material, petroleum control, and boat cleaning management measures.

Should this program prove unsuccessful, Maryland can draw upon existing laws and regulations to ensure implementation of the fish waste, liquid material, petroleum control, and boat cleaning management measures. The discharge of any pollutant into State waters without a permit is prohibited by Maryland Code Annotated Environment Article '9-322. Maryland Code Annotated Environment Article '9-323 provides the authority to require a discharge permit for any operation that could cause or increase the discharge of pollutants into the waters of the State.